

Can What You Eat Affect Your Mental Health?

By Kelli Miller

FROM THE WEBMD ARCHIVES 

Aug. 20, 2015 -- What's for dinner? The question is popping up in an unexpected place -- the psychiatrist's office.

More research is finding that a nutritious diet isn't just good for the body; it's great for the brain, too. The knowledge is giving rise to a concept called "nutritional (or food) psychiatry."

"Traditionally, we haven't been trained to ask about food and nutrition," says psychiatrist Drew Ramsey, MD, an assistant clinical professor at Columbia University. "But diet is potentially the most powerful intervention we have. By helping people shape their diets, we can improve their mental health and decrease their risk of psychiatric disorders."

Nearly 1 in 4 Americans have some type of mental illness each year. The CDC says that by 2020, depression will rank as the second leading cause of disability, after heart disease.

It's not just a problem for adults. Half of all long-term mental disorders start by age 14. Today, childhood mental illness affects more than 17 million kids in the U.S.

Recent studies have shown "the risk of depression increases about 80% when you compare teens with the lowest-quality diet, or what we call the Western diet, to those who eat a higher-quality, whole-foods diet. The risk of attention-deficit disorder (ADD) doubles," Ramsey says.

A Growing Idea

Just 5 years ago, the idea of nutritional psychiatry barely registered a blip on the health care radar. There had been a few studies examining how certain supplements (like omega-3 fatty acids) might balance mood. Solid, consistent data appeared to be lacking, though.

But experts say many well-conducted studies have since been published worldwide regarding a link between diet quality and common mental disorders -- depression and anxiety -- in both kids and adults.

"A very large body of evidence now exists that suggests diet is as important to mental health as it is to physical health," says Felice Jacka, president of the International Society for Nutritional Psychiatry Research. "A healthy diet is protective and an unhealthy diet is a risk factor for depression and anxiety."

There is also interest in the possible role food allergies may play in schizophrenia and bipolar disorder, she says.

But nearly all research involving eating habits and mental health has focused more on depression and anxiety. And there's no direct evidence yet that diet can improve depression or any other mental disorder, although a trial to determine this is now underway.

Experts caution that while diet can be part of a treatment plan, it shouldn't be considered a substitute for medication and other treatments.

Here's what they do know about how diet may play a role in mental health. What you eat affects how your immune system works, how your genes work, and how your body responds to stress.

3 Ways Diet Impacts Your Mental Health

Here are some more details on how good nutrition impacts brain health:

1. It's crucial for brain development.

"We are, quite literally, what we eat," says Roxanne Sukol, MD, preventive medicine specialist at Cleveland Clinic's Wellness Institute. "When we eat real food that nourishes us, it becomes the protein-building blocks, enzymes, brain tissue, and neurotransmitters that transfer information and signals between various parts of the brain and body."

2. It puts the brain into grow mode.

Certain nutrients and dietary patterns are linked to changes in a brain protein that helps increase connections between brain cells. A diet rich in nutrients like omega-3s and zinc boosts levels of this substance.

On the other hand, "a diet high in saturated fats and refined sugars has a very potent negative impact on brain proteins," Jacka says.

3. It fills the gut with healthy bacteria.

And that's good for the brain. Trillions of good bacteria live in the gut. They fend off bad germs and keep your immune system in check, which means they help tame inflammation in the body. Some gut germs even help make brain-powering B vitamins.

Foods with beneficial bacteria (probiotics) help maintain a healthy gut environment, or "biome." "A healthier microbiome is going to decrease inflammation, which affects mood and cognition," Ramsey says.

A high-fat or high-sugar diet is bad for gut health and, therefore, your brain. Some research hints that a high-sugar diet worsens schizophrenia symptoms, too.

This Is Your Brain On ... Kefir?

Certain foods may play a role in the cause of mental disorders, or they may make symptoms worse. A nutritious brain diet follows the same logic as a heart healthy regimen or weight control plan. You want to limit sugary and high-fat processed foods, and opt for plant foods like fresh fruits, veggies, and whole grains. Swap butter for healthy fats like olive oil, too. In other words, try a Mediterranean diet.

It's "an ideal diet for physical and mental health," Jacka says. Recent results from a large trial in Europe show that such an eating plan may also help prevent, and not just treat, depression.

The key is to choose foods that pack as many nutrients in as few calories as possible. Nutrients might be particularly helpful for treating or preventing mental illness are:

- *B vitamins*. People with low B12 levels have more brain inflammation and higher rates of depression and dementia. Falling short on folate has long been linked to low moods.
- *Iron*. Too little iron in the blood (iron-deficiency anemia) has been linked to depression.
- *Omega-3s*. These healthy fatty acids improve thinking and memory and, possibly, mood.
- *Zinc*. This nutrient helps control the body's response to stress. Low levels can cause depression. A great source is oysters, which pack 500% of your

daily need of zinc but have just 10 calories apiece, Ramsey says. Mussels, which are rich in brain-healthy selenium, are also a good choice.

Also, fermented foods such as kefir, sauerkraut, kimchi, and yogurt with live active cultures, which provide good gut bacteria, may help reduce anxiety, stress, and depression. Fatty fish like salmon and mackerel provide omega-3 fatty acids, vitamin B12, zinc, selenium and other brain boosters. And dark chocolate has antioxidants, which increase blood flow to the brain, aiding mood and memory.

Unfortunately, the Western diet is "extremely low" in these nutrients, Ramsey says. He's working on a new tool called the Brain Food Scale, to be published later this year. It will provide a quick look at the nutrient-to-calorie relationship.

Does Diet Replace Medicine?

You should always talk to your doctor before stopping or taking less of any medication you're on.

"No matter where you are on the spectrum of mental health, food is an essential part of your treatment plan," Ramsey says. "If you are on medications, they are going to work better if you are eating a brain-healthy diet of nutrient-dense foods."

Ramsey recommends that you talk to your doctor about what you *should* eat -- not just what you shouldn't. He hopes that one day a simple 5-minute food assessment will become part of every psychiatric evaluation.

Nutritionists like the idea.

"More psychiatrists need to recognize the nutrition-mental health connection," says Michelle Schoffro Cook, PhD, who is registered by the International Organization of Nutritional Consultants. "We can have so much power over our mental health using food and nutrients."

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Sources

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